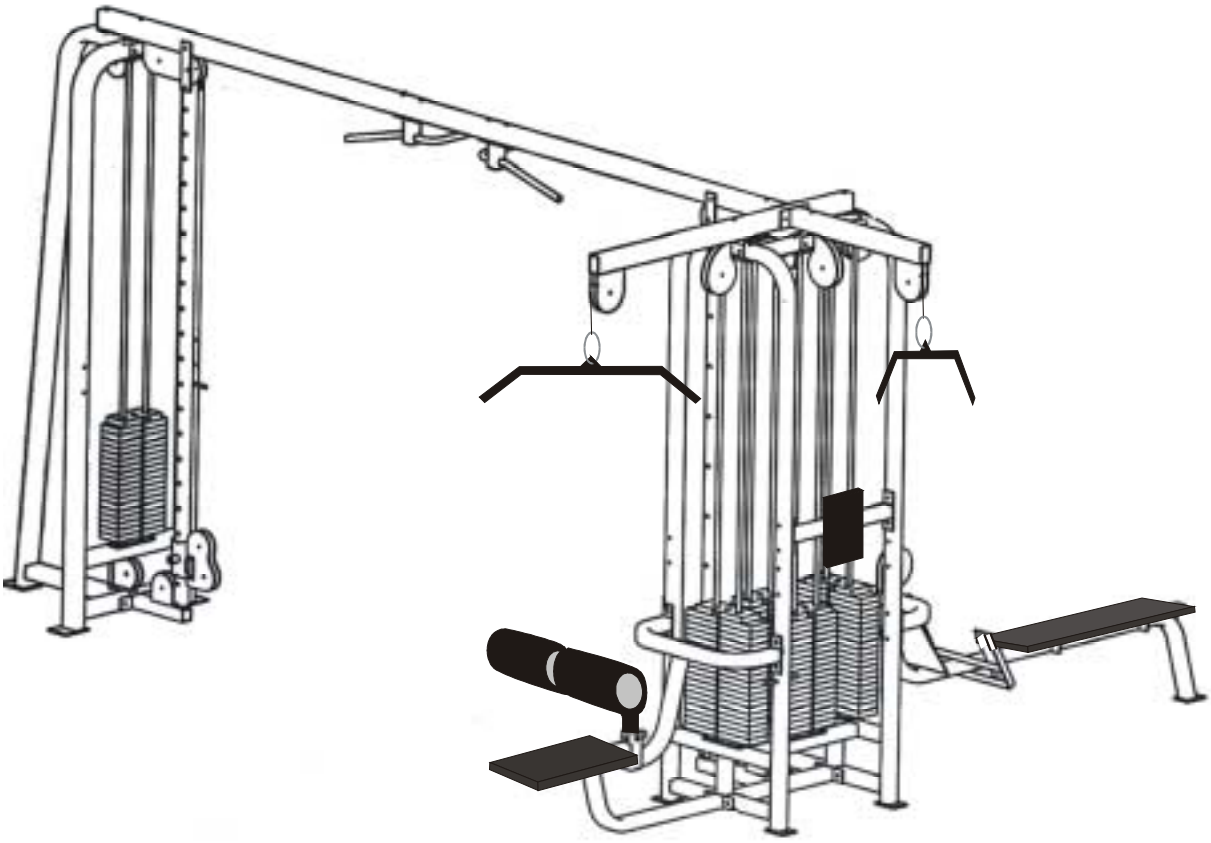
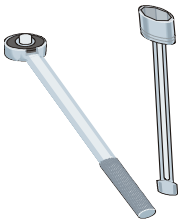
5 STACK MULTI-JUNGLE (SM51)
WITH 2 ADJUSTABLE PULLEYS
UNPACKING AND ASSEMBLY INSTRUCTIONS



The SM51 comes partially assembled. Follow the steps below to complete the assembly.

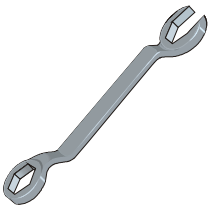
WARNING: *COMPONENTS OF THE SM51 ARE LARGE AND HEAVY. USE CAUTION WHEN ASSEMBLING THIS MACHINE.*

MATERIALS AND TOOLS REQUIRED FOR ASSEMBLY



1/2”, 3/8”, 5/8” & 9/16” Socket wrench

1/8” Hex key wrench



5/8” & 9/16” Combination wrench

Pinch bar

You will also need a ladder and a piano dolly to lift and position the weight stacks.

ASSEMBLY TIME

Two people can accomplish this assembly in approximately 2 hours.

UNPACKING

Follow the steps below when unpacking the components of the SM51.

1. **Cut off the shipping wrapper.**
2. **Remove the parts box and shipping boards.**
3. **Remove the items in the parts box.** These items are shown in Figure 1.
   A. Remove the bolts bag.
   B. Remove the parts shown below. Parts that are used to build the SM51 are described in the section *HARDWARE* at the end of these instructions.

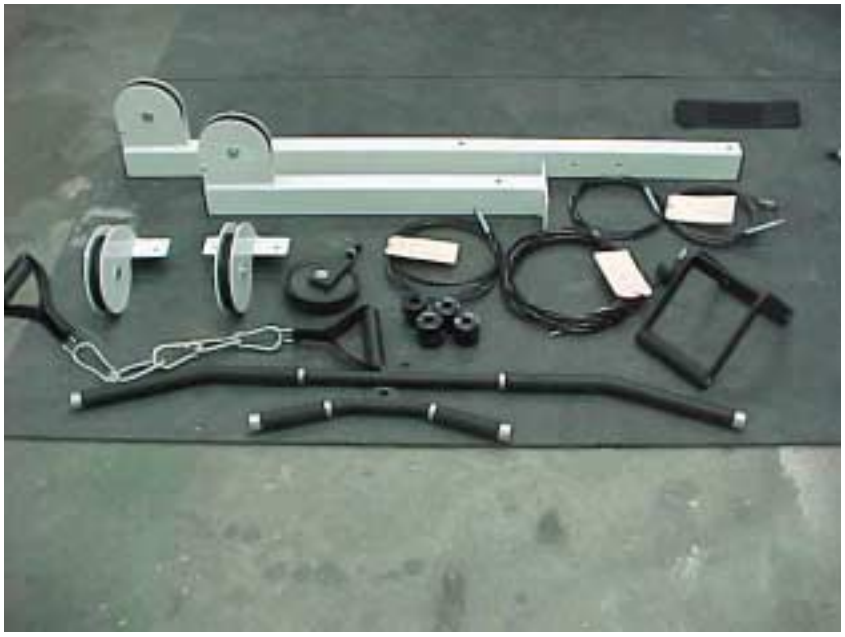


Figure 1. Parts box contents.

ASSEMBLY

Figure 2 shows an assembled SM51.

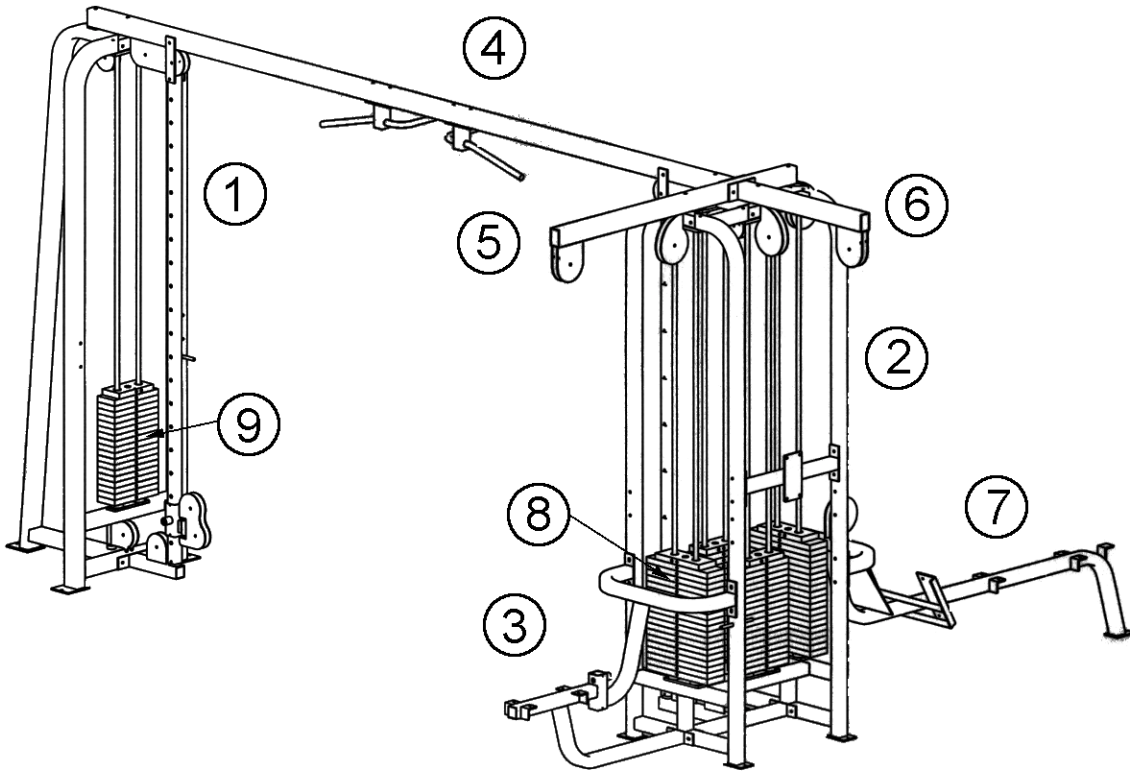


Figure 2. SM51 main components (seats and cables removed for clarity).

1. 1 stack cell
2. 4 stack cell
3. Lat bench
4. Connecting beam
5. Lat top
6. Tricep top
7. Low row bench
8. 300 lb. Weight stacks (2)
9. 190 lb. Weight stacks (3)

1. **Place the two weight "cells**" in their final resting spots. The cells will be approximately 11'4" apart as shown in Figure 3.

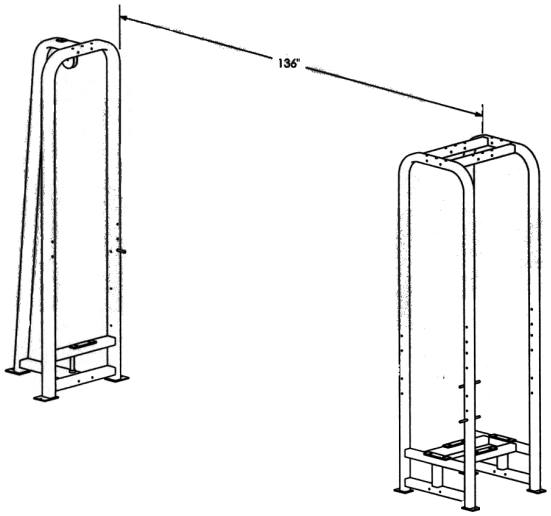


Figure 3. Set the weight stack cells.

2. **Bolt on the teardrop pulleys** above the benches (see Figure 4) on the 4 stack cell using two 3/8” x 2-3/4” hex head bolts (used to bolt the cross beam to the cross members and the adjustable pulley tops to the top beams). Include the 3/8” flat washer, end cap washers, end caps and 3/8” Nyloc (locknut). Use the bolt configuration shown in Figure 5. You may wish to use a pinch bar to align the bolt holes.

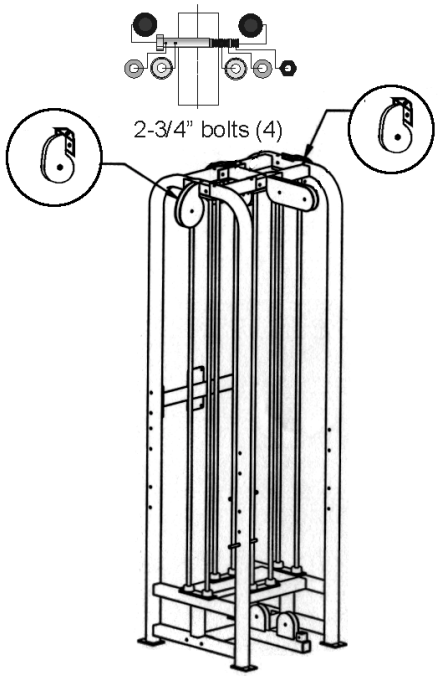


Figure 4. Bolt on the teardrop pulleys.

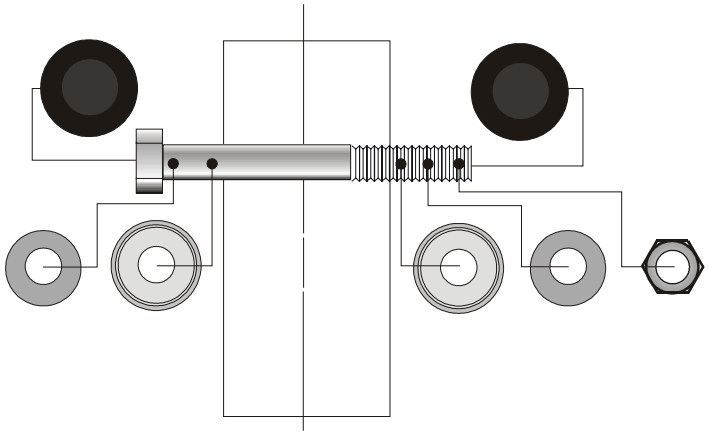


Figure 5. Configuration for 2-3/4” and 3” bolts.

3. **Bolt on the connecting beam** (part 4 from Figure 2) using a 5/8” socket with extension and combination wrench, to the cells using two of the large 7/16” x 6” bolts, 7/16” washers, and 7/16” nuts (parts A, B, and C in *HARDWARE* section at end of these instructions), end cap washers and end caps (parts F and H in *HARDWARE* section). Figure 6 shows the connected cells. You will need to remove the pulleys from the teardrop pulley assemblies to gain clearance for the socket wrench extension. Leave the pulleys out of the housings until the cables have been installed.

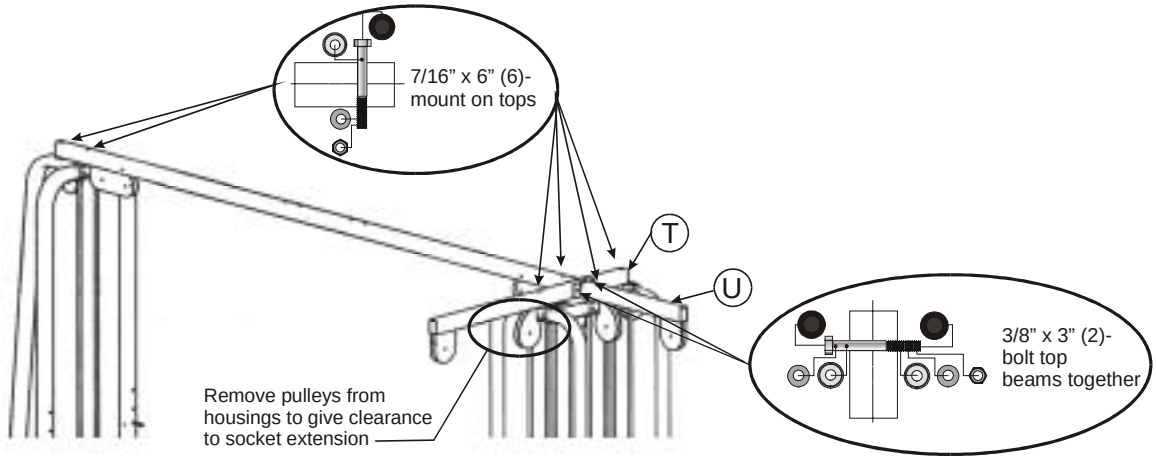


Figure 6. Bolt on the connecting beam, lat top, and tricep top.

4. **Mount the 56” lat top** (part T from *HARDWARE* section) to the 4-stack cell using a 5/8” socket and combination wrench. Insert two of the large 7/16” by 6” bolts using the hardware configuration shown in Figure 7. Mount the 29” tricep top (part U in *HARDWARE* section) to the frame and connecting beam (See Figure 7).

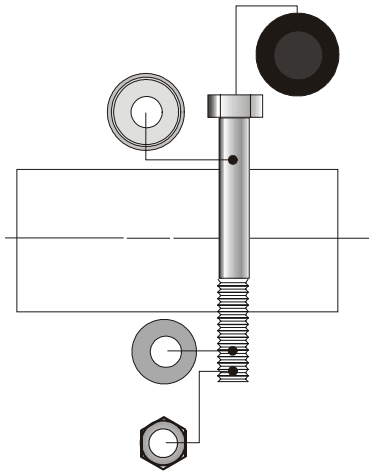


Figure 7. Configuration for 6” bolts.

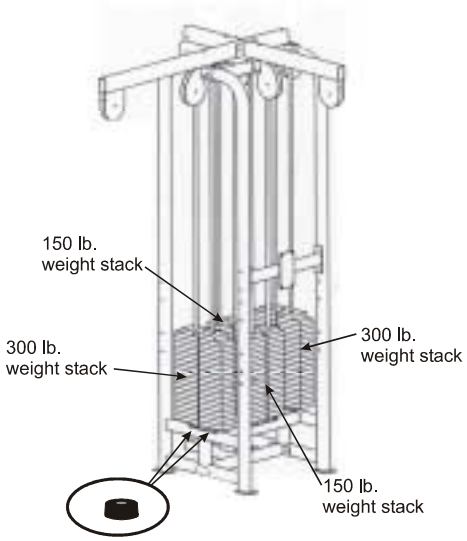


Figure 8. Mount the weight stacks.

5. **Mount the weight stacks to the 4-stack cell.** To do this:

   A. **Remove the tricep back rest bolts** using a 9/16” socket and combination wrench (see Figure 9).

   B. **Unbolt the top plate and remove the guide rods** using a 9/16” socket and combination wrench (see Figure 9).

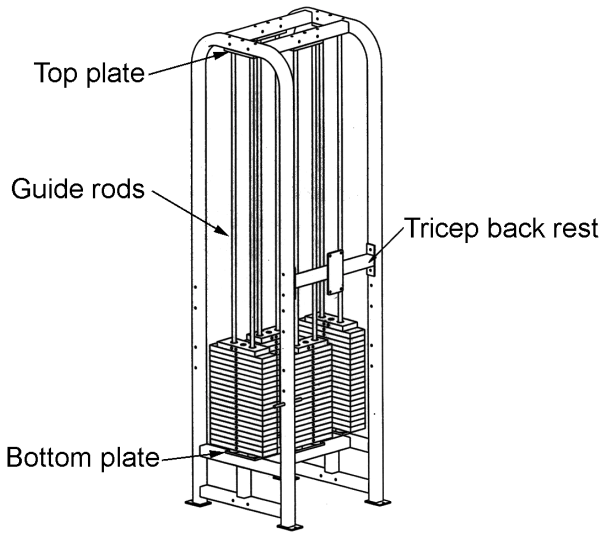
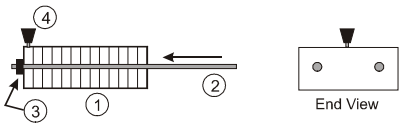
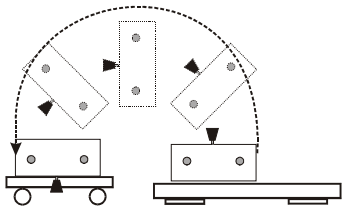


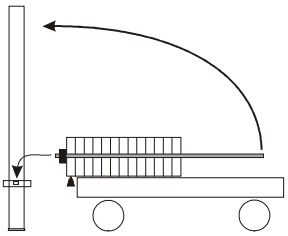
Figure 9. Remove the tricep back rest, the top plate and the guide rods.



C. Prepare the weight stack- add bumpers to bottom, insert guide rods, put pull pin in bottom plate of stack.



D. Flip over the weight stack onto piano dolly.



E. Hoist the weight stack onto the machine.

Figure 10. Putting on the weight stacks.

C. **Prepare the weight stacks.** Slide the guide rods (2) through the weight stacks (1) as shown above. Place rubber bumpers (3) on the bottoms of each guide rod. Make sure the pull pin (4) is in the bottom weight plate.

D. **Flip over the weight stacks.** When shipped, the weight stacks have the pull pins facing upward. You will need to flip the stacks over so that the pull pins are facing outward when they are loaded onto the machine. Since the pull pins will be facing downward when they are flipped over, it is recommended that you put the stacks on a padded carpet to keep the pins from being damaged.

E. **Set the weight stacks onto the machine.** Using a piano dolly, lift the weight stacks over the bottom plate and set the stacks onto the rubber bumpers with the plate numbers facing outward. The 300 lb weight stacks need to be facing the “sides” of the cells (where the benches will be attached- see Figure 9). The 190 lb weight stacks will need to be facing the “outsides” and “insides” of the cells (where the tricep pulley adjustable pulleys will be attached- see Figure 9). Make sure all pull pins are facing outward.

F. **Bolt on the top plate.** With the top plate on the guide rods, bolt on the top plate to the top of the cells as shown in Figure 11 using a 9/16” socket and combination wrench and the 3” bolts (with cap washers) that were previously inserted.

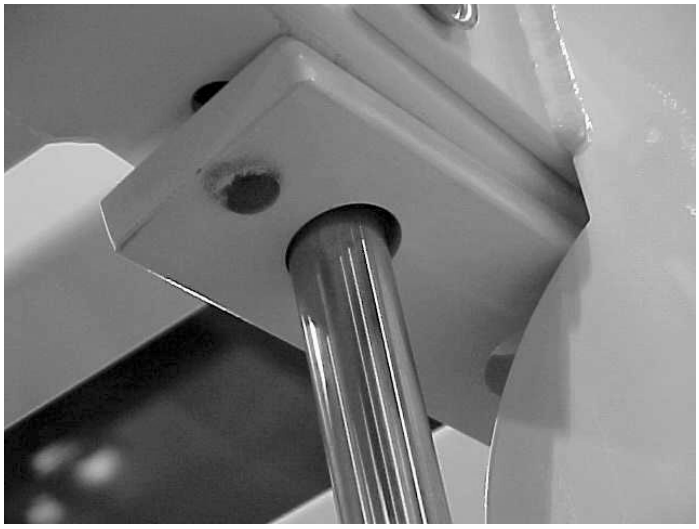


Figure 11. Bolt on the top plate.

6. **Bolt the floating pulley into the 190 lb cable crossover weight stack** (NOT intended for the tricep pushdown weight stack- the one with the tricep back rest mounted to the frame as shown in Figure 9) using a 7/8” combination wrench. You will need to remove the pulley from the housing to thread the plug into the weight stack bayonet. Make sure the 9/16” jam nut is threaded 1-5/8” away from the pulley as shown in Figure 12. Leave the pulleys out since you will need to have them out when the cable is routed.

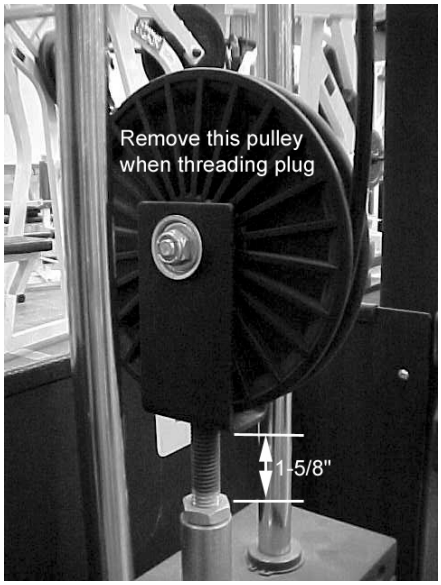


Figure 12. Bolt the floating pulley into the 190 lb weight stack (away from the tricep pushdown weight stack).

7. **Mount adjustable pulley brackets.** When shipped, the adjustable pulley brackets look like the ones shown in Figure 13. The bolts need to be removed and the bracket needs to be positioned so that the top of the bracket is in the top hole as shown by the arrow in Figure 13. Use a 3” bolt with flat washers, end cap washers and end caps. When you remove the bolts, leave the pulley bolt and pulley out since you will need to thread the cable with the pulley removed.

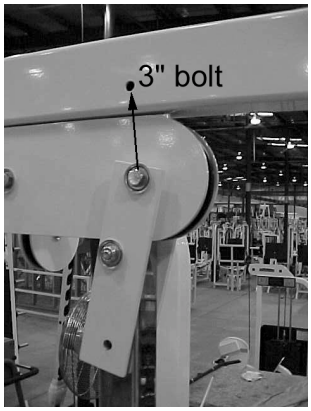


Figure 13. Mount adjustable pulley bracket.

8. **Mount the seated row and lat bench to the frame.** Using the bolts specified in Figure 14 and a 9/16” socket and combination wrenches, mount the benches as shown in Figures 14 and 15.

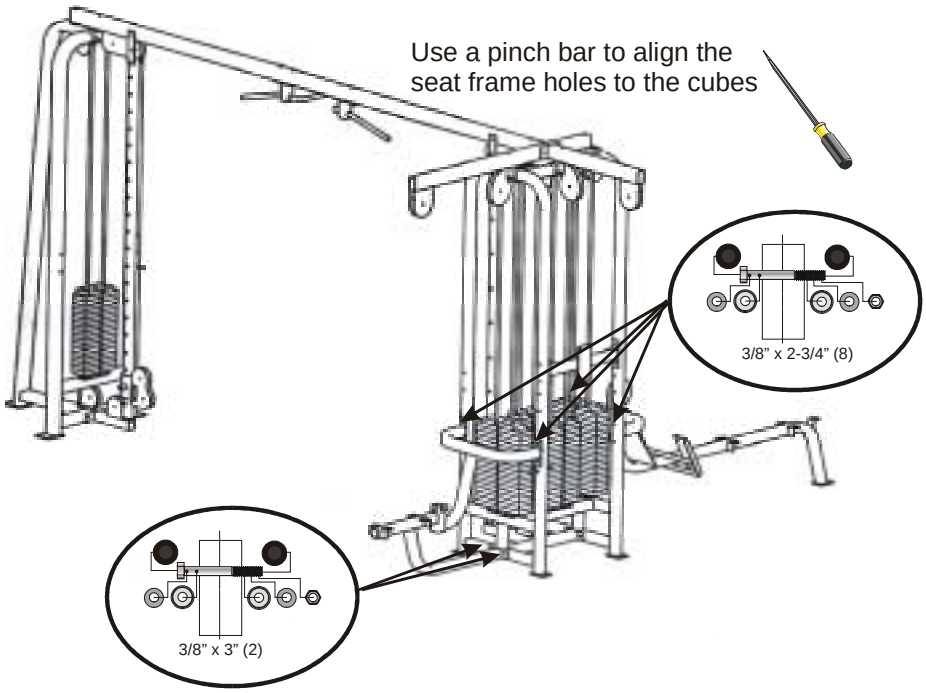


Figure 14. Mount the benches to the frame.

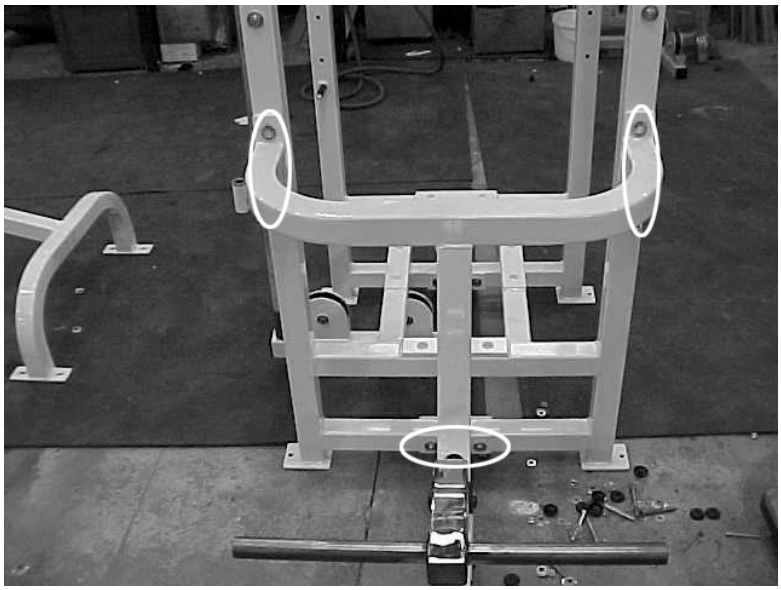


Figure 15. Bolt the benches to the frame.

INSTALLING THE CABLES

The SM51 uses five cables. There are three different types of cable used on the SM51. They are:

1. Adjustable crossover cables (ball end cables) (2).
2. Low row cable (the long cables) (1).
3. Lat pulldown and tricep cables (2).

The lat and tricep cables can be identified by their short length, the low row cable can be identified by its long length and the adjustable crossover cables can be identified by the ball on the end of the cable. The routings for these cables are shown in the figures below.

NOTE: *YOU MUST REMOVE ALL PULLEYS TO ROUTE THE CABLES. USE A 9/16" COMBINATION WRENCH AND SOCKET TO DO THIS (SEE FIGURE 16). YOU MAY WISH TO REMOVE THE SHOULDER BOLTS (FIGURE 16 RIGHT SIDE) BY USING A 3/8" COMBINATION WRENCH AND A 1/8" HEX KEY WRENCH. WHEN YOU HAVE ROUTED THE CABLES, REPLACE ALL PULLEYS AND PLACE END CAPS ON NUT AND BOLT ENDS. YOU MAY NEED TO PRY THE PULLEY HOUSINGS OPEN TO REPLACE THE PULLEYS.*

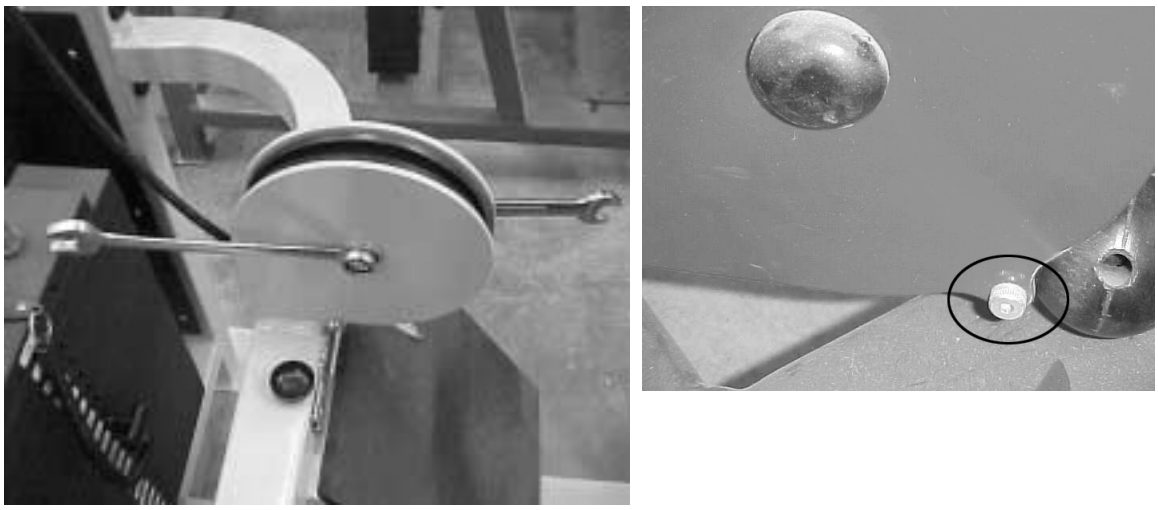


Figure 16. Removing the pulley bolts.

ADJUSTABLE CROSSOVER CABLE ROUTING

Once you've removed the pulleys as described previously, route the adjustable crossover cable on the 4-stack cell as shown in Figure 17. The crossover cable is routed at the factory on the 1 stack cube (shown at right in Figure 17).

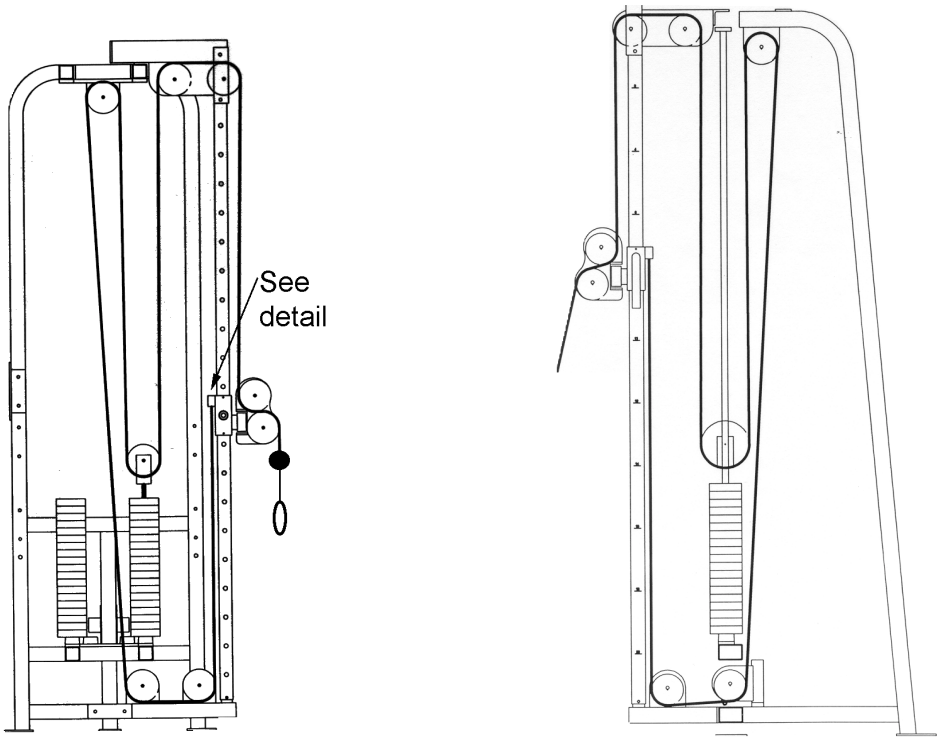


Figure 17. Adjustable crossover cable routing.

Figure 18. Adjustable crossover cable end detail.

Using a 7/8” wrench, tighten the jam nut onto the adjustable pulley threads as shown in Figure 18. Place a rubber cap on the top of the cable as shown in Figure 18 (right).

LOW ROW CABLE ROUTING

Route the low row cable as shown in Figure 19.

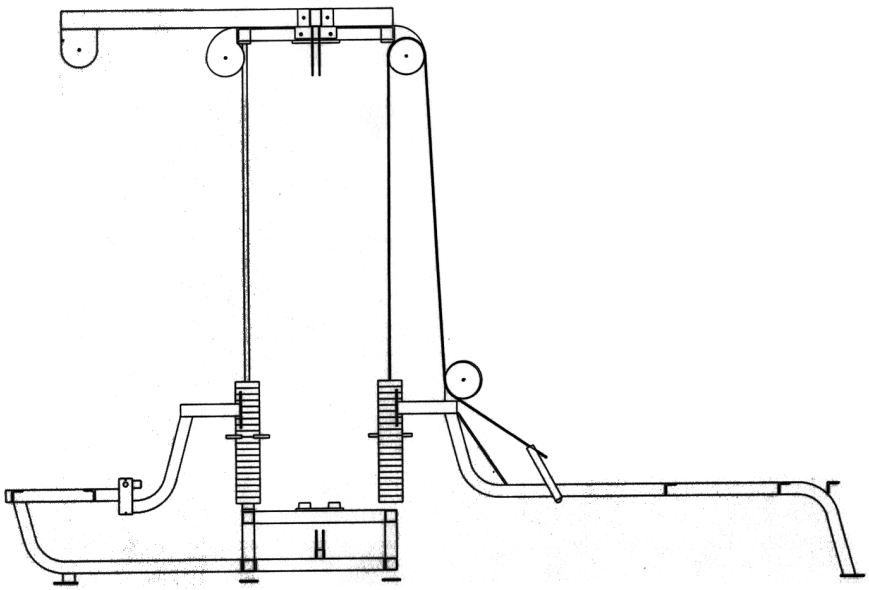


Figure 19. Low row cable routing.

Bolt the cable to the weight stacks as shown in Figure 20. Thread the 7/8” nut up on the cable bolt as shown at left. Screw the bolt down into the weight stack as shown at right. Tighten the bolt with a 7/8” combination wrench.

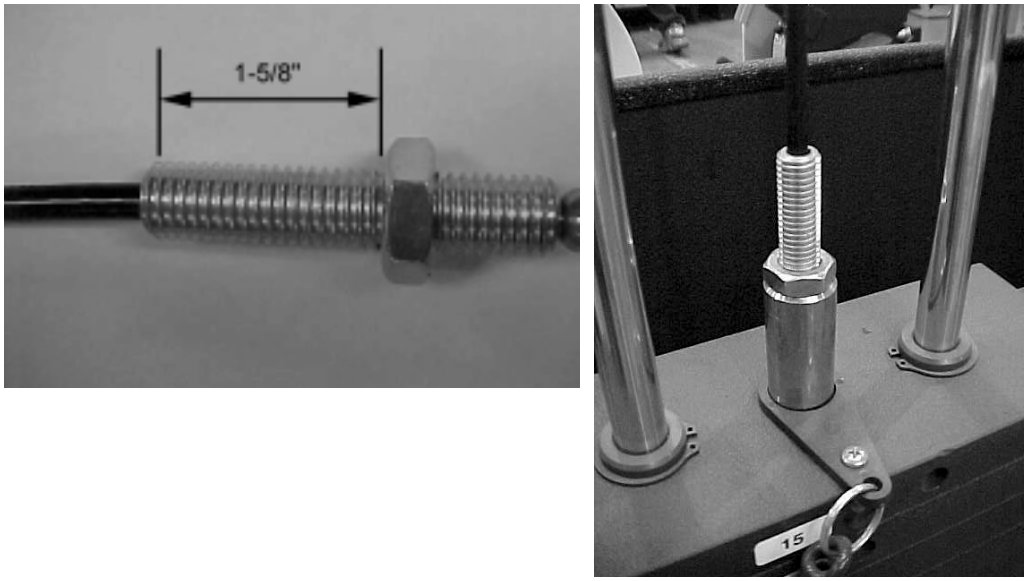


Figure 20. Screw the cable into the weight stack.

LAT PULLDOWN CABLE ROUTING

Route the lat pulldown cable as shown in Figure 21. Screw the cable into the weight stack as shown previously in Figure 20.

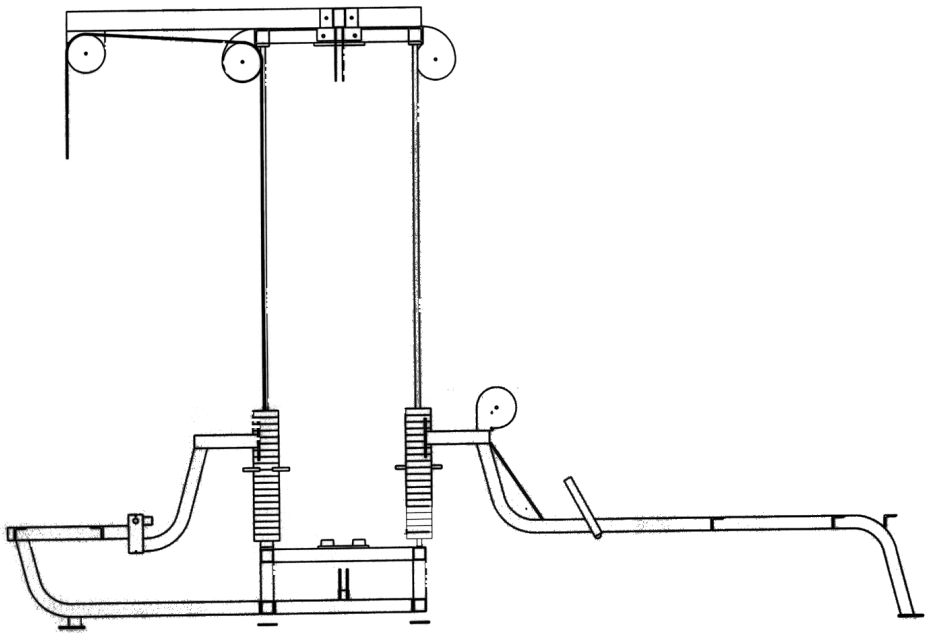


Figure 21. Lat pulldown cable routing.

TRICEP PUSHDOWN CABLE ROUTING

Route the tricep pushdown cable as shown in Figure 22. Screw the cable into the weight stack as shown previously in Figure 20.

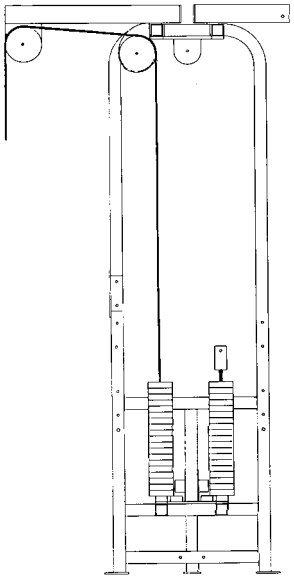
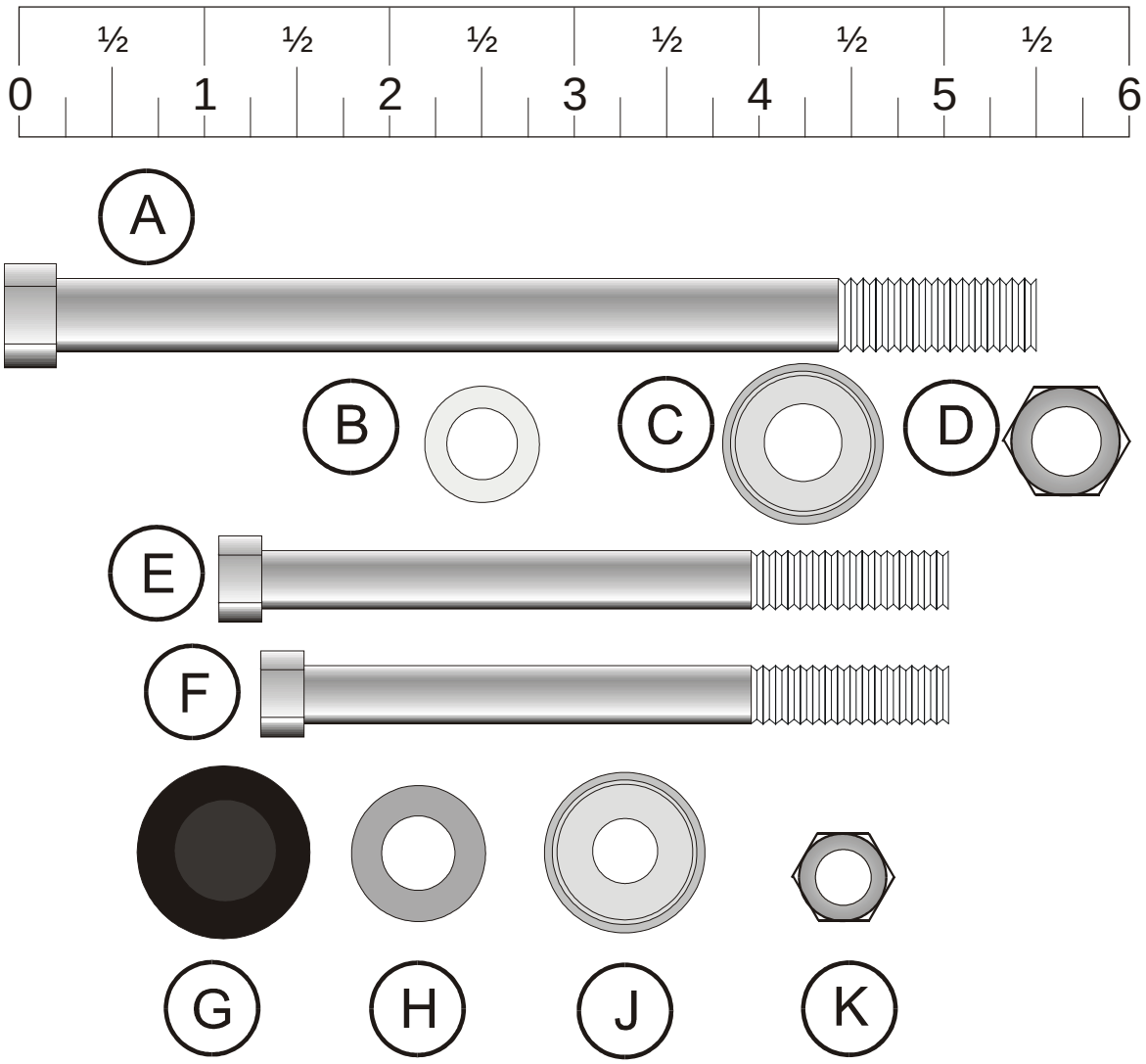


Figure 22. Tricep pushdown cable routing.

HARDWARE



Hardware Figure 1. Assembly Parts.

The parts shown in Hardware Figure 1 are used to assemble the SM51. They are:

A. 7/16” x 6” hex head bolt (used to bolt the tricep top beam, adjustable crossover top beam, lat top beam, and connecting beam to the tops of the cells)

B. 7/16” flat washer

C. 7/16” cap washer (used on the head end of the 6” bolt so end cap will fit on the nut)

D. 7/16” hex head nut

E. 3/8” x 3” hex head bolt (used to bolt the cross beam to the cross members, the adjustable pulley tops to the top beams, and the bottom bolts on the lat bench)

F. 3/8” x 2-3/4” hex head bolt (used for all other connections)

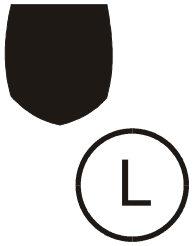
G. End caps (bolt covers)

H. 3/8” flat washer

J. 3/8” end cap washers (end caps snap onto them)

K. 3/8” Nyloc (locknut)

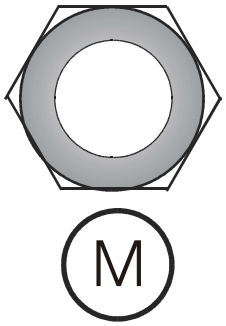
The black rubber caps shown in Hardware Figure 2 are used to cap the ends of the cables that are threaded to the adjustable pulleys.



Hardware Figure 2. Rubber cap.

L. Rubber cap

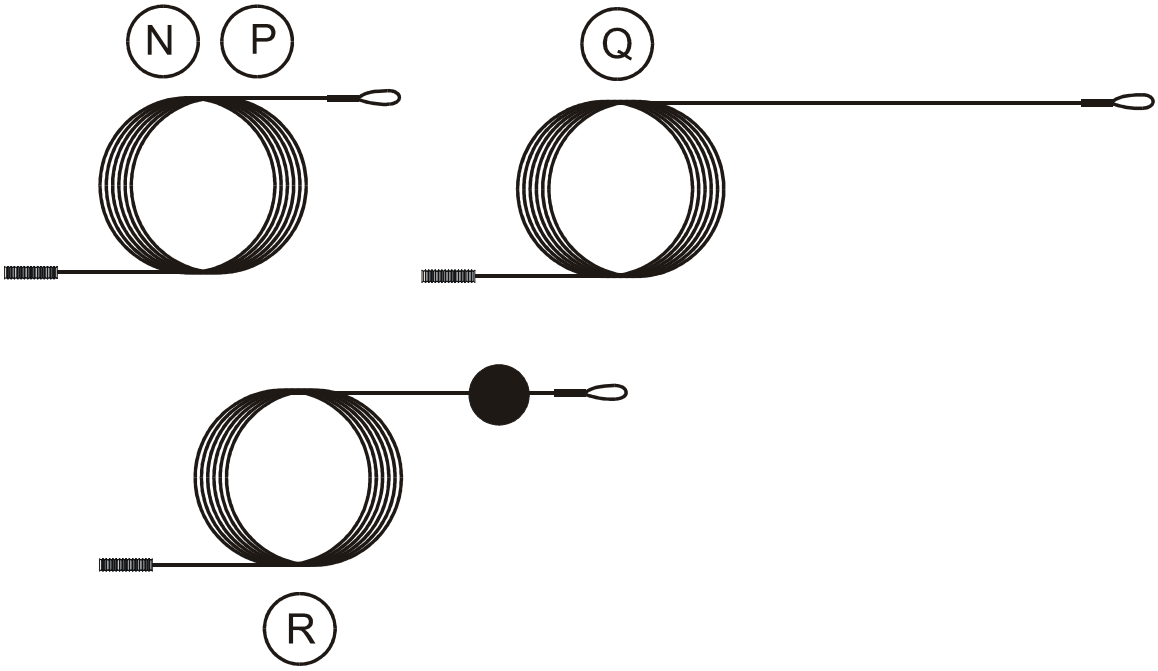
The part shown in Hardware Figure 3 is the 9/16” cable jam nut that’s used to secure the cables to the weight stacks.



Hardware Figure 3. Cable jam nut.

M. Cable jam nut

Hardware Figure 4 shows the types of cables that are included with the SM51.



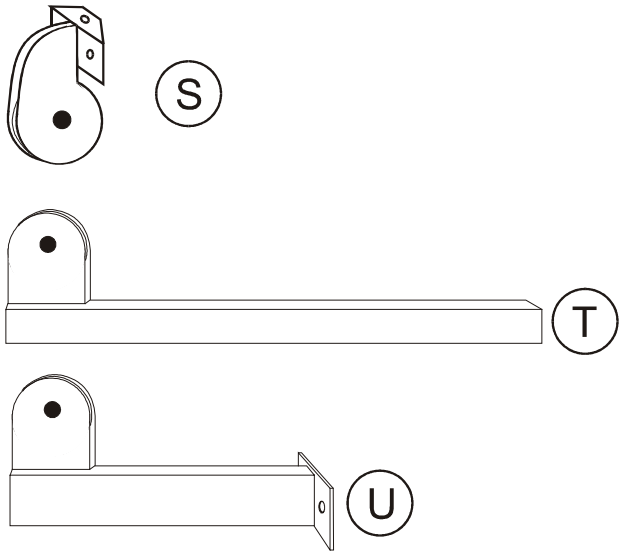
Hardware Figure 4. Cables.

N. Lat pulldown cables (same as tricep cable) (1)

P. Tricep cable (same as lat pulldown cable) (1)

Q. Low row cables (long cable) (1)

R. Adjustable crossover cables (ball end) (2)

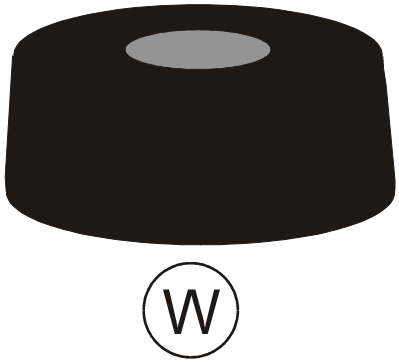


Hardware Figure 5. Top assemblies.

S. Teardrop pulleys (bolt on above lat and seated row bench) (2)

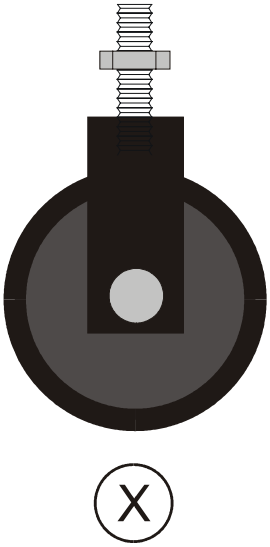
T. 56” Lat top (bolt to top of 4-stack cell with pulleys above lat bench) (1)

U. 29” Tricep top (bolt on to 56” lat top bar) (1)



Hardware Figure 6. Weight stack rubber bumpers.

W. Weight stack rubber bumpers (inserted under weight stacks) (8)



Hardware Figure 7. Floating pulleys.

X. Floating pulley (bolt to 190 lb weight stack other than tricep pushdown stack) (1)

PARTS LIST

Part #	ID	Description	Quantity
	Main components		
	1	1-stack cell	1
	2	4-stack cell	1
	3	Low row bench	1
	4	Connecting beam	1
	5	Lat top	1
	6	Tricep top	1
	7	Lat bench	1
	8	300 lb weight stack	2
	9	190 lb weight stack	3
	Cables, caps & nuts		
0017-00042-0936	L	Rubber cap	1
0017-00103-0234	M	Cable jam nut	4
0017-00101-1408	N	Lat pulldown cable	1
0017-00101-1408	P	Tricep cable	1
0017-00101-1422	Q	Low row cable	1
0017-00101-1561	R	Adjustable crossover cable	2
	6” bolt hardware		
0017-00101-1561	A	7/16” x 6” hex head bolt	6
0017-00104-0363	B	7/16” flat washer	6
0017-00104-0366	C	7/16” cap washer	6
0017-00103-0233	D	7/16” Nyloc nut	6
	2-3/4” & 3” bolt hardware		
0017-00101-1422	E	3/8” x 3” hex head bolt	6
0017-00101-1408	F	3/8” x 2-3/4” hex head bolt	12
0017-00042-0969	G	End cap	36
0017-00104-0313	H	3/8” flat washer	36
0017-00104-0368	J	3/8” end cap washer	36
0017-00103-0217	K	3/8” Nyloc nut	18
	Pulleys and bumpers		
0017-00042-0993	W	Weight stack rubber bumper	8
	X	Floating pulley	1
	Handle and bar hardware		
		Safety carabiner	5
		Crossover handle	2
		Tricep bar	1
		Lat bar	1
		Low row handle	1
		Leg strap	1

0017-00101-1413 0017-00104-0368 0017-00103-0217	**Pulley hardware (installed)**	1-3/4” Bolt Cap washer 3/8” Nyloc nut	
0017-00101-1413 0017-00104-0313 0017-00103-0217	**Floating pulley hardware (installed)**	1-3/4” Bolt Flat washer 3/8” Nyloc nut	